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**PATENT**  
Atty. Docket No. MIT-075C2 (5473/79)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANTS: Massie et al. CONFIRMATION NO.: 3150  
SERIAL NUMBER: 10/022,114 GROUP NUMBER: 2123  
FILING DATE: November 16, 2001 EXAMINER: Not assigned  
TITLE: Force Reflecting Haptic Interface

**RESPONSE TO NOTICE TO FILE CORRECTED APPLICATION PAPERS**

This paper is submitted in response to the Notice to file Corrected Application Papers mailed from the United States Patent Office on August 13, 2002. Prior to examination, please enter this Response and consider the accompanying remarks. Amend the application as follows, without prejudice.

**In the Claims:**

Cancel claim 63 and add claims 64-82 to read as follows. A copy of the claims commencing on a separate sheet in accordance with 37 CFR 1.75(h) is enclosed herewith.

64. (New) An apparatus for generating a signal representative of force, the apparatus comprising:

a receiver for receiving a signal representative of a location of a user reference point relative to a user reference frame;

a geometrical model storing:

a representation of a non-local reference frame;

the user reference frame in relation to the non-local reference frame; and

a conformation of a non-local environment, the conformation comprising a spring-type element relative to the non-local reference frame;

a comparator for comparing the location of the user reference point relative to the non-local environment; and